

CORNELL UNIVERSITY OFFICIAL PUBLICATION

Volume XXVIII

Number 16

Announcement of the
**Graduate School of
Education**
for 1937-38

Ithaca, New York
Published by the University
April 1, 1937

THE UNIVERSITY CALENDAR FOR 1937-38

1937

FIRST TERM

Sept. 20,	<i>Monday,</i>	Entrance examinations begin.	
Sept. 27,	<i>Monday,</i>	Registration and assignment of new students.	
Sept. 28,	<i>Tuesday,</i>	Registration and assignment of old students.	
Sept. 30,	<i>Thursday,</i>	Instruction begins at 8 A.M.	
Oct. 21,	<i>Thursday,</i>	Last day for payment of tuition for the first term.	
Nov. 24,	<i>Wednesday,</i>	Instruction ends at 6 P.M.	} Thanksgiving Recess
Nov. 29,	<i>Monday,</i>	Instruction resumed at 8 A.M.	
Dec. 18,	<i>Saturday,</i>	Instruction ends at 1 P.M.	

1938

Jan. 3,	<i>Monday,</i>	Instruction resumed at 8 A.M.	} Christmas Recess
Jan. 11,	<i>Tuesday,</i>	Founder's Day.	
Jan. 29,	<i>Saturday,</i>	Instruction ends.	
Jan. 31,	<i>Monday,</i>	Term examinations begin.	
Feb. 9,	<i>Wednesday,</i>	Term ends.	
Feb. 10,	<i>Thursday,</i>	A holiday.	

SECOND TERM

Feb. 11,	<i>Friday,</i>	Registration of all students.	
Feb. 14,	<i>Monday,</i>	Instruction begins at 8 A.M.	
Mar. 7,	<i>Monday,</i>	Last day for payment of tuition for the second term.	
April 2,	<i>Saturday,</i>	Instruction ends at 1 P.M.	} Spring Recess
April 11,	<i>Monday,</i>	Instruction resumed, 8 A.M.	
May —	<i>Saturday,</i>	Spring Day: a holiday.	
June 6,	<i>Monday,</i>	Term examinations begin.	
June 14,	<i>Tuesday,</i>	End of term examinations.	
June 20,	<i>Monday,</i>	COMMENCEMENT.	

GRADUATE SCHOOL OF EDUCATION

FACULTY

LIVINGSTON FARRAND, A.B., M.D., L.H.D., LL.D., President of the University.
EDMUND EZRA DAY, S.B., A.M., Ph.D., LL.D., President-elect of the University.
ALBERT RUSSELL MANN, A.M., D.Sc., D.Agr., LL.D., Provost of the University.
FLOYD KARKER RICHTMYER, A.B., Ph.D., Dean of the Graduate School.
JULIAN EDWARD BUTTERWORTH, A.B., A.M., Ph.D., Director of the Graduate School of Education.

STAFF OF INSTRUCTION

HOWARD R. ANDERSON, Ph.D., Assistant Professor of Education (Teaching of the Social Studies).
THOMAS L. BAYNE, jr., Ph.D., Assistant Professor of Rural Education.
EMMA M. S. BESIG, Ph.D., Instructor in Education (Teaching of English).
CORA E. BINZEL, M.S., Professor of Rural Education.
JULIAN EDWARD BUTTERWORTH, Ph.D., Professor of Rural Education.
ETHEL L. COWLES, A.B., Instructor in Rural Education.
THEODORE HILDRETH EATON, Ph.D., Professor of Rural Education.
EMERY N. FERRISS, Ph.D., Professor of Rural Education.
FRANK SAMUEL FREEMAN, Ed.D., Professor of Education.
LUELLE PEARL GARDNER, Ph.D., Instructor in Rural Education.
MABEL HASTIE, B.S., Instructor in Rural Education.
EDWIN RAY HOSKINS, Ph.D., Assistant Professor of Rural Education.
M. LOVELL HULSE, Ph.D., Assistant Professor of Education and Chairman of the Bureau of Educational Service.
MARGARET HUTCHINS, A.M., Instructor in Rural Education.
PHILIP G. JOHNSON, Ph.D., Assistant Professor of Education (Teaching of Science).
RIVERDA HARDING JORDAN, Ph.D., Professor of Education.
WILLIAM F. KENNAUGH, B.S., Instructor in Rural Education.
PAUL J. KRUSE, Ph.D., Professor of Rural Education.
MAX LUDWIG WOLFRAM LAISTNER, M.A., Professor of History.
CLYDE B. MOORE, Ph.D., Professor of Rural Education.
ROBERT MORRIS OGDEN, Ph.D., Professor of Education.
_____, Instructor in Rural Education.
E. LAURENCE PALMER, Ph.D., Professor of Rural Education.
PRESERVED SMITH, Ph.D., Litt.D., Professor of Medieval History.
ROLLAND MACLAREN STEWART, Ph.D., Professor of Rural Education.
ANDREW LEON WINSOR, Ph.D., Professor of Rural Education.

REPRESENTATIVES OF ACADEMIC GROUPS

WALTER BUCKINGHAM CARVER, Ph.D., Professor of Mathematics. (1938)
WALTER PETER CLAASSEN, Ph.D., Professor of Biology and Entomologist and Biologist in the Experiment Station. (1937)
ROBERT E. CUSHMAN, Ph.D., Goldwin Smith Professor of Government. (1938)
WILLIAM CLYDE DEVANE, Ph.D., Professor of English. (1939)
CHARLES LOVE DURHAM, Ph.D., Litt.D., Professor of Latin. (1939)
ROSWELL CLIFTON GIBBS, Ph.D., Professor of Physics. (1938)
MARY F. HENRY, M.A., Assistant Director of the College of Home Economics. (1937)
ELMER SETH SAVAGE, Ph.D., D.Sc., Professor of Animal Husbandry and Animal Husbandman in the Experiment Station. (1937)

ASSISTANTS, 1936-37

RUSSELL H. BROADHEAD, A.B., Assistant in Rural Education.
 CHRIS JAY CHRISTENSEN, A.B., Assistant in Rural Education.
 MALCOLM B. GALBREATH, B.S., Assistant in Rural Education.
 EVA L. GORDON, M.S., Assistant in Rural Education.
 MILO J. PETERSON, B.S., Assistant in Rural Education.
 WILLIAM A. SMITH, M.S., Research Assistant in Agricultural Education.

COOPERATING TEACHERS IN THE ITHACA HIGH SCHOOLS

1936-37

CLARA S. APGAR, A.B.	BLANCHE S. MARCH
HELEN R. BIGHAM, A.B.	M. ISABEL MURRAY, A.B., M.A.
SAMUEL J. CATALFANO, A.B.	ADELINE NEWMAN, B.S.
MAYFRED CLAFLIN, B.S.	MARGARET M. REIDY, A.B., M.A.
JOSEPHINE CONLON, A.B.	LILLY ROBINSON, A.B.
RICHARD C. CROSBY, B.S.	ROBERT R. SCIDMORE, B.S.
LEWIS ELDRÉD, A.B.	ESTHER M. SEARS
W. ROBERT FARNSWORTH, B.S.	ARTHUR C. STEVENS, B.S.
ALFRED H. GROMMON, A.B.	MARIAN L. WARREN, A.B., M.A.
ELOISE T. HADLOCK	MILDRED P. WATKINS, A.B., M.A.
ROBERT H. HUBBELL	CATHERINE M. WELCH, A.B., M.A.
ELWOOD A. LAFORTUNE, B.S.	THERESA WEST, A.B., B.S.
OSWALD LAUBENSTEIN, A.B.	MILDRED WILLIAMS, A.B.
MARY V. McALLISTER, A.B., M.A.	FLORENCE WILLIAMSON, A.B.
LLOYD F. McINTYRE, B.S.	ADELAIDE C. WRIGHT, A.B.

GRADUATE SCHOOL OF EDUCATION

The Graduate School of Education is composed of The Department of Education in the College of Arts and Sciences and The Department of Rural Education in the College of Agriculture.

Although the organization is designated as a graduate school, and although the major part of the offerings are on the graduate level, it has responsibility, also, for professional courses in Education offered to undergraduates in the various colleges. The undergraduate courses include those that are ordinarily required for a state teacher's certificate (see pages 14-16), together with a few additional courses designed to be attractive, because of their general educational value, to students not planning to enter the teaching profession. There is no independent undergraduate college at Cornell for the training of teachers. Students on the undergraduate level who are preparing for teaching normally register in the College of Agriculture, in the College of Arts and Sciences or in the College of Home Economics and must meet the standards for graduation set by the College in which they are enrolled.

The Graduate School of Education is an integral part of the Graduate School of the University, and as such, is subject to its general regulations. The prospective student should, therefore, consult also the Announcement of the Graduate School.

CHANGING CONDITIONS IN SECONDARY SCHOOL TEACHING

Standards in the teaching profession have made considerable advance during the last several years. Although the possession of a Bachelor's degree has, in the past, usually been regarded as sufficient for secondary school teaching, those who have training beyond such a degree are likely, during the next few years, to find themselves in a preferred situation with regard to securing such positions. Although Cornell will not, for the present at least, discontinue its four-year program for training secondary school teachers, it is advisable that as many as possible plan to take five years for this purpose. Under the five-year program some of the professional courses in Education should be postponed to the fifth year, but the student should give particular attention early in his course to making certain that he shall have taken, by the end of this period, a combination of subjects that will enable him to fit into a secondary school situation. Under certain conditions those taking this fifth year of training may secure a Master's degree as described below. Whether the student receives his training in four years or five, it is important that he confer as early as possible with some member of the Education staff who is familiar with secondary school conditions.

GRADUATE WORK

1. The degrees of Master of Arts, Master of Science, and Doctor of Philosophy are administered directly by the Graduate School of Cornell University.

2. The degree of Master of Science in Education is administered directly by the Graduate School of Education, subject to the regulations of the Graduate School of Cornell University.

ADMISSION

To be admitted to the Graduate School an applicant (1) must have received his baccalaureate degree from a college or university of recognized standing, or have done work equivalent to that required for such degree; (2) as judged by his previous scholastic record, or otherwise, must show promise of ability satisfactorily to pursue advanced study and research; and (3) must have had adequate previous preparation in his chosen field of study to enter at once into graduate study.

Seniors in the colleges of Cornell University who have completed the academic requirements for the Bachelor's degree, and who qualify under (2) and (3) may, subject to the approval of the deans of their respective colleges, be admitted to the Graduate School.

Students admitted to the Graduate School are usually expected to pursue a course leading to one of the advanced degrees; but a properly qualified person who, for special reasons, does not wish to meet the requirements for a degree may arrange a program of graduate study suitable to his purposes.

An applicant who is not a graduate of Cornell University must submit complete official transcripts of all previous college studies.

Applications for admission, made on the proper forms, should be filed in the office of the Graduate School at the earliest possible date and, ordinarily, not later than August 10 and January 25 for entrance to the first and second terms, respectively; and not later than June 25 for entrance to the summer session. Admission to candidacy for the degree of Master of Science in Education is the same as for other advanced degrees, except that the requirement in foreign language is omitted. Persons interested in becoming candidates for this degree should address inquiries either to the Dean of the Graduate School or to the Director of the Graduate School of Education, or to both. Formal application for admission should be sent to the Dean of the Graduate School.

Students may be admitted to the Graduate School in one of the following three classes:

- (1) Candidates for degrees;
- (2) Graduate students not candidates for degrees: "non-candidates";
- (3) Resident Doctors.

CANDIDATES FOR DEGREES:

Language requirements for admission. No student may be admitted to candidacy for the A.M., or the M.S. degree whose training does not include three units of entrance in one language or two in each of two. There is no language requirement for admission to candidacy for the Master of Science in Education degree.

Candidates for the Doctor's degree are expected to possess a reading knowledge of two foreign languages at the beginning of their candidacy at Cornell for that degree. For further details regarding the language requirement for the Ph.D. see the Graduate School Announcement.

Major and Minor Subjects. A candidate for an advanced degree must select within his field of study a branch to which he intends to devote the larger part of his time and which is called his Major Subject. In addition, a candidate for the doctorate must select two other subjects, called Minor Subjects, properly related to his Major Subject. Except in the case of a Master of Science in Education,¹ a candidate for a Master's degree must select one such Minor Subject.

Special Committees. The work of each graduate student is in charge of a Special Committee. After the student has chosen his Major and Minor Subjects, he must select one or more members of the Graduate Faculty, to represent each subject and to serve as the members of his Special Committee, the representative of his Major Subject being the chairman. Their consent so to serve, together with a statement of the student's Major and Minor Subjects, approved by the members of his Special Committee, must be filed with the Dean of the Graduate School on the proper blank not later than two weeks after first registration in the Graduate School.

Changes in Special Committees. A student may change the membership of his Special Committee with the approval of all the members of the newly constituted Committee. Notice of such change must be filed *immediately* with the Dean of the Graduate School. A vacancy on a Special Committee, caused by the absence of a member from the University, may be filled by the Dean on joint recommendation of the absent member and the student.

GRADUATE STUDENTS NOT CANDIDATES FOR DEGREES: A student admitted to the Graduate School but not a candidate for an advanced degree is required to select one or more advisers to direct his work. He must present to the Dean not later than two weeks after registration for each term a statement of the studies which he intends to pursue, approved by his adviser(s) and by each of the members of the Faculty under whom the work is to be done. Non-candidates are expected to pursue a coordinated program of graduate work.

RESIDENT DOCTORS: Persons who hold a Doctor's degree or who have equivalent standing may, subject to permission from the Dean, register in the Graduate School as Resident Doctors, for the purpose of engaging in advanced study and research in a field in which they

¹See p. 10.

have had adequate previous preparation. On the recommendation of the Dean, Resident Doctors are exempt from the payment of tuition and all fees except laboratory charges.

THE RESIDENCE REQUIREMENT

No student will be awarded any degree by Cornell University unless he has spent at least one full academic year, or the equivalent, in residence and study at the University as candidate for that degree. For the Ph.D., a minimum of six terms of residence is required; for each of the master's degrees, a minimum of two terms. To receive credit for residence a student must be regularly enrolled in the Graduate School as a candidate for the degree in question; and the satisfactory completion of his work, term by term, must be attested by the members of his Special Committee. For details see the Announcement of the Graduate School.

THE MASTER'S DEGREE

The degree A.M. or M.S. is conferred upon a candidate who, after completing at least one year of residence devoted to the study of a field comprising a Major Subject and one Minor Subject, presents a satisfactory thesis, or essay, as the chairman of the candidate's Special Committee may decide and passes an examination on his special field. The thesis, or essay, must demonstrate the candidate's ability to do independent work, and must be acceptable in style and composition.

A statement of the general subject of the thesis, or essay, with the written approval of the chairman of the Special Committee in charge of the candidate's work, must be filed in the office of the Dean at least six months before the candidate expects to present himself for examination.

After this thesis, or essay, has been duly presented and is accepted by the Special Committee, the candidate is required to present himself for examination on his Major and Minor Subjects and on the subject matter of his thesis.

The final examination which covers the thesis and the major and minor subjects may be written or oral, or both, at the option of the examining committee, and is open to all members of the faculty. In the event of failure in the examination, no reexamination may be held until three months have elapsed.

THE DEGREE OF DOCTOR OF PHILOSOPHY

The degree of Doctor of Philosophy is conferred upon a candidate who, after completing not less than three years of resident graduate work devoted to the study of a field of work comprising a Major Subject and two Minor Subjects, presents a satisfactory thesis, and passes an examination on his chosen field and on the subject matter of his thesis.

The Doctor's degree is intended to represent, not a specified amount of work covering a specified time, but the attainment, through long study, of independent and comprehensive scholarship in a special field.

Language Requirement. Each candidate for the degree of Doctor of Philosophy must demonstrate his ability to read both French and German (or two languages, other than English, approved by his Special Committee), by passing in each of these languages an examination given by a member of the Language Examination Board. The two languages so approved shall be significantly useful in the candidate's field of work and not chosen solely with reference to the preparation of the thesis. Candidates for the degree of Doctor of Philosophy are expected to meet the foreign language requirements at the beginning of their candidacy at Cornell University for that degree. A minimum of seven terms of residence is required of a candidate who does not pass at least one language examination at this time. The extra term of residence may not be required if, with the approval of the student's Special Committee and of the General Committee of the Graduate School, preparation in foreign language is made during a period when the student is not receiving residence credit. A minimum of three terms of residence is required after completion of all language requirements, except in the case of a student admitted to candidacy with two or more terms of residence credit; in such case, a minimum of two terms is required. Language examinations passed within one month after registration are considered as being passed at the time of registration. Additional requirements in foreign language may be made at the discretion of the student's Special Committee.

Thesis Requirement. The thesis for the Doctor's degree must give evidence of the candidate's power to carry on independent investigation and must be satisfactory in style and composition. A statement of the general subject of the thesis, with the written approval of the chairman of the Special Committee in charge of the candidate's work, must be filed in the office of the Dean at least six months before the candidate expects to present himself for examination. The thesis must be acceptable to the candidate's Special Committee in respect of both scholarship and literary quality. The completed thesis must be in the hands of the Special Committee at least fifteen days before the final examination for the Doctor's degree; and, during the five days immediately preceding this examination a typewritten copy approved by all members of the Special Committee, shall be on file in the office of the Graduate School. Under no circumstances may either final examinations B or C be given before the thesis has been accepted and filed. See page 10.

Two bound typewritten copies (one of which must be a ribbon copy) of the completed thesis, approved by the Special Committee, must be deposited in the office of the Graduate School before the degree can be conferred. These copies become the property of the University Library. A candidate for the Degree of Doctor of Philosophy

must deposit in the Dean's office, along with the two bound copies of his thesis, a typewritten abstract thereof, about 1500 words and not exceeding 1700 words in length, approved by the Chairman of the Special Committee, and must pay to the Treasurer of the University a fee of \$10 to defray the cost of printing this abstract.

Qualifying Examination. The primary purposes of the qualifying examination are (1) to ascertain whether the student is qualified to continue work for the doctorate; and (2) to plan the student's work during the remainder of his candidacy. The examination is ordinarily given at the end of the first year of graduate study, if that year is at Cornell. If the student has had one year or more of graduate work elsewhere, the qualifying examination should be given as soon as possible after his entrance into the Graduate School. The qualifying examination may be oral or written or both. Any member of the Special Committee may waive his part of the qualifying examination. The report on the qualifying examination shall, however, be made by the Special Committee as a whole, after consultation. If a candidate fails to pass the qualifying examination, no re-examination shall be allowed except on recommendation of the Special Committee. Before presenting himself for Final Examination B or C (see next paragraph), each candidate must have earned at least two terms of residence credit after the passing or the waiving of the qualifying examination.

Final Examinations. The final examinations, covering (1) the Major and Minor Subjects and (2) the thesis and related topics, may, at the discretion of the Special Committee, be given either separately or in combination. When the two parts are given separately, an examination dealing mainly with the Major and Minor Subjects and designated as Final Examination A, may be given at the end of the fourth term of candidacy, or thereafter. Examination A may be both oral and written. The early completion of Examination A will leave the student free to devote his attention to the thesis and collateral studies during the remainder of his candidacy. Final Examination B, on the thesis and related topics and on such other work as the student may have done after completing Examination A, will be given after the residence requirement has been satisfied and the thesis has been completed and filed as provided on page 9. This examination may be oral, or both oral and written, at the discretion of the Special Committee.

THE MASTER'S DEGREE IN EDUCATION

The degree of Master of Science in Education is conferred upon a candidate, who, after completing not less than one year of residence devoted to study in the field in which Education constitutes the major portion, has given satisfactory evidence of ability to carry graduate work, and has met such other requirements as his Special Committee with the approval of the Graduate School of Education may have established. Every candidate must have passed a final comprehensive examination.

This degree is designed for school executive officers and teachers who wish to enter upon a course of professional study involving neither close restrictions nor intensive research. This course of study is both comprehensive and critical. It has, however, a distinctly professional emphasis. The amount of prescribed work will be adjusted to the particular preparation and experience of the candidate. In general these candidates are expected to fall into one of three classes:

CLASS I. Men and women, graduates of standard colleges, of approved experience in educational positions, who are seeking professional preparation on the graduate level.

CLASS II. Men and women, graduates of standard colleges, who wish to qualify as school principals or as supervisors in special fields in accord with professional requirements of various states.

CLASS III. Men and women, graduates of standard colleges, qualified for graduate work, but who have not included in their undergraduate programs courses in the field of Education sufficient for certification as teachers.

1. With the approval of the Director of the Graduate School of Education the candidate shall choose three members of the graduate faculty to serve as a special committee to direct his work. At least two of these shall be from the staff in Education, one of the two being selected by the candidate to act as chairman. This committee is empowered to determine the special qualifications of the candidate to undertake a program proper to his particular professional interest. An approved program must have unity, in terms both of purpose and of sequential development. The candidate is not required to present a formal thesis; but, if he does not do so, he is expected to complete an expository or critical essay or a problem in research to the satisfaction of his committee. Within an approved program are included such courses, seminars, projects, investigations and examinations as the committee may require. These provisions may have the consequence of extending the residence requirements for students of Class III beyond the minimum of one year.

2. The office of the Director of the Graduate School of Education acts as an office of record, and the candidate for one of these degrees shall, within ten days of his registration, file in writing a statement approved by his committee showing his plan of work and course of study.

3. The student's special committee, not later than the middle of the third summer of study (or the end of the first term of graduate study), shall determine the fitness of the candidate to continue his candidacy for this degree through examination or such other suitable means as the committee may elect. The action of the Committee shall be recorded in the office of the Graduate School of Education.

4. Upon the satisfactory completion of the work outlined by the Special Committee and the passing of a final comprehensive examination, the faculty of the Graduate School of Education will recommend to the Faculty of the Graduate School that the candidate be

granted the appropriate degree. The maximal period allowed for the completion of all requirements conforms to the regulations of the Graduate School of Cornell University.

5. Prior to scheduling the final examination, all members of the staff under whom the candidate has carried his course work or who have acted in any advisory or similar capacity with him will be informed of his proposed examination and will be asked to express an opinion regarding his fitness for such examination, and will be invited to be present and to take part in the examination.

6. The courses expected of the candidate will fall into three groups designated A, B, C. The determination of the particular groups into which particular courses will fall will depend upon the main professional purpose of the candidate in his graduate study and an integration of courses to such purpose.

GROUP A. This group includes courses of a special nature and of immediate interest, such as the technical courses in English, in the languages (or a language), history, sciences (or a science), agriculture (or a division thereof), etc., and the professional studies appropriate to the special field. It is expected that at least a third of the candidate's program will fall in this group.

GROUP B. This group includes courses in the theory and science of education which will furnish the several types of background that are warranted by the nature of courses in Group A. Courses to the extent of one-third of the total may be chosen in this group. Educational Psychology, including Measurement, History and Philosophy of Education and other courses necessary to integration, such as general studies appropriate to the organization and administration of schools at the several educational levels, are representative of this group.

GROUP C. This group includes courses intended to meet the particular needs of the candidate not adequately met in Groups A and B. In certain cases as much as a third of the candidate's program should be taken in this group.

For the selection of courses in all the above groups, the candidate should consult his special committee, whose approval is necessary.

TUITION FEES IN THE GRADUATE SCHOOL

A tuition fee of \$150 for the academic year is to be paid by all students registered in the Graduate School. It is payable in installments of \$75 at the beginning of each term.

Certain classes of students are exempt from the payment of the tuition fee. They are:

- (1) Graduate students holding certain appointments as University Fellows or Graduate Scholars, and holders of certain temporary fellowships and scholarships.
- (2) Resident Doctors upon recommendation of the Dean.
- (3) Certain members of the instructing staff. See the Announcement of the Graduate School for 1937-38.

A member of the teaching staff registered in the Graduate School, whose salary equals or exceeds \$1500 shall pay tuition at the rate of three-quarters of the tuition regularly charged full-time students.

A matriculation fee of \$11, an administration fee of \$12.50 a term, a health and infirmary fee of \$6 each term, a Willard Straight Hall fee of \$5 each term, and a graduation fee of \$20 are also charged. A thesis fee of \$10 is required of each candidate for the Ph.D. degree.

Any tuition or other fee may be changed by the Board of Trustees to take effect at any time without previous notice.

TUITION FEES IN THE UNDERGRADUATE COLLEGES

Facts regarding tuition fees in the several schools and colleges of the University can be found in the General Information Number.

SCHOLARSHIPS AND ASSISTANTSHIPS

Edward A. Sheldon Scholarship for Women Teachers. This scholarship is awarded by the faculty of the Graduate School of Education "to any woman of suitable qualifications who needs this assistance", preference being given candidates in this order: first, a woman graduate of the normal school at Oswego, N. Y.; second, a woman graduate of any other normal school of the state; third, a suitably qualified woman who is preparing to teach. The regulations of the faculty of the Graduate School of Education require that the holder of this scholarship be pursuing work on the graduate level. The present annual income is about \$120.

Assistantships in Rural Education. The Department of Rural Education will award four assistantships to graduate students majoring in the Department. These assistantships pay \$350 each and allow the holder free tuition in the Graduate School. In return each student is expected to render eight hours of service each week.

Honorary Scholarships. Five free tuition scholarships in the Graduate School shall be made available each year to persons of superior qualifications, residents of New York State, seeking preparation for public school service in the field of rural education. Preference shall be given to persons in the following groups who have been released from their regular positions for the purpose of graduate study: (1) principals and teachers in the public schools of New York State, located in places of less than 4500 population; (2) members of the staff of any New York State normal school or teachers college.

Details regarding any of these scholarships and assistantships may be secured from the Director of the Graduate School of Education. Application for any of them should be made to the Director not later than March 1.

BUREAU OF EDUCATIONAL SERVICE

A Bureau of Educational Service is maintained by the Graduate School of Education. Its purpose is to assist men and women who have studied or are studying at Cornell University to secure positions in educational work. Such persons are invited to register with the Bureau. Address: Bureau of Educational Service, 251 Goldwin Smith Hall, Ithaca, N. Y.

THE SUMMER SESSION

The term of the Cornell University Summer Session covers a period of six weeks from early July to the middle of August. A wide range of courses is offered for those in educational work. Prospective students should apply to the Director of the Summer Session for a copy of the official announcement.

REQUIREMENTS FOR CERTIFICATION

CERTIFICATES FOR SECONDARY SCHOOL TEACHERS

To meet the requirements of the State of New York for teaching in the secondary schools, the candidate is required to complete 18 semester hours in Education. The following program, approved by the State Department of Education, gives information as to the specific courses through which these professional requirements may be met.

Educational Psychology.	3 hours
Ed.* 1 or R. E.* 111 or R. E. 112	
Principles of Education.	3 hours
Ed. 2 or R. E. 181	
Methods, Observations, Teaching, and Extra-instructional Problems.	9 hours
These are integrated units of work which may be met, for the various groups of teachers through the following courses:	
Teachers of Agriculture: R. E. 131, R. E. 132 and R. E. 133.	
Teachers of English, Science, and Social Studies: Ed. 4a or R. E. 121, Ed. 4b (including R. E. 126 for Science Teachers), and Ed. 4c.	
Teachers of Home Making: R. E. 135, R. E. 136, and R. E. 137.	
Teachers of Latin and French: Ed. 4a, Ed. 4c, Ed. 4d, and Ed. 4f or Ed. 4g.	
Teachers of other approved subjects: Ed. 4a, Ed. 4c, Ed. 4d, and Ed. 4e.	
Elective.	3 hours
Teachers of Homemaking are required to take R. E. 117 (Psychology of Childhood and Adolescence). Others may choose a three-hour course in Education or Psychology subject to the approval of their adviser in the Graduate School of Education.	

In addition, the prospective high school teacher must present a minimum number of semester hours of University credit in the subject matter field he plans to teach. If he is working in a special field, such as Agriculture or Homemaking, he must have 36 hours of credit in approved professional-technical courses in his special subject. For teaching English, the minimum requirement is 18 hours; for any foreign language, it is 18 hours based upon 3 units of entrance credit; for History, 18 hours based upon 2 units of entrance credit; for Mathematics, 15 hours based upon 2 units of entrance credit; for Science, 30 hours; for Biological Science, 18 hours; for Physical Science, 18 hours; for Social Studies, 30 hours.

As early as possible in his course the student who is planning to prepare for teaching should consult that member of the staff of the Graduate School of Education most directly concerned with the teaching of his subject.

The courses suggested above are the ones that are normally expected to be used in meeting certification requirements. Substitutions should be made only with the approval of the appropriate adviser in the Graduate School of Education.

*"Ed." refers to courses offered in the Department of Education; "R.E.", to courses offered in the Department of Rural Education.

Requirements for certification vary from state to state. These variations are so marked that adequate information cannot be given in brief space. It is the intention of the School to offer such courses as will insure qualification for teaching certificates generally but in many cases this will involve the working out of special programs for individual students. Accordingly, students are advised to communicate with the office of the Graduate School of Education for information regarding their special needs.

ADMINISTRATIVE CERTIFICATES

The following programs prepare for three kinds of principalships. Each program is divided into three groups of courses: (1) a required group of 12 hours; (2) a preferred-elective group of 6-12 hours; (3) a general elective group of 6-12 hours. While these programs have been prepared with New York certificate requirements in mind, they may be adapted to meet the requirements of other states.

		Type of principal's certificate		
		Elementary	High School	12-grade
1.	Required group—12 hours			
1.	Administration			
	General (R. E. 261)			x
	High School (Ed. 5)		x	
	Elementary school (Ed. 23)	x		
2.	Curriculum (R. E. 276)	x	x	x
3.	Educational Measurements (R. E. 251)	x	x	x
4.	Mental Measurement (Ed. 7)	x	x	x
5.	Seminar (R. E. 265)	x	x	x
6.	Supervision (R. E. 263)	x	x	x
2.	Preferred elective group—6-12 hours (Selection will be made for each type of certificate in the light of the candidate's needs)			
1.	Child Activity Education (R. E. 122)			
2.	Economics and the School (Ag. Econ. 238)			
3.	Elementary Curriculum (R. E. 276a)			
4.	Elementary Supervision (R. E. 266)			
5.	Extra-class Activities (Ed. 11)			
6.	Guidance (Ed. 28)			
7.	High School Administration (advanced) (Ed. 10)			
8.	High School Curriculum (R. E. 276b)			
9.	Mental Hygiene (Hygiene 1)			
10.	Problem Child (Ed. 12)			
11.	Philosophy of Education (R. E. 294)			
12.	Principles and Practices of Vocational Education (R. E. 267c)			
13.	School and Community (R. S. O. 124)			
14.	School Finance (R. E. 262a)			
3.	General Elective Group—6-12 hours			

These electives may be chosen from academic subjects, from Group 2, or from other advanced professional courses. Selection should be so made that an integrated program for each candidate will be achieved.

For New York State *permanent* certificates, the following requirements must be satisfied in addition to those outlined above:

1. To qualify for an elementary principal's certificate the candidate must have completed an approved program for the preparation of elementary school teachers. Similarly, the candidate for a secondary principal's certificate must have completed an approved program for the preparation of secondary school teachers.

2. For the elementary certificate at least 8 hours in administration, organization, and supervision must be included in the student's graduate or undergraduate work; for the secondary certificate there must be at least 10 hours in these fields. In groups 1 and 2 above appropriate courses from among the following may be counted toward satisfying this requirement: R. E. 261; Ed. 5; Ed. 23; R. E. 263; R. E. 266; Ed. 11; Ed. 28; Ed. 10; R. E. 267c; R. E. 262a. Other courses dealing with problems of administration, organization and supervision may be included on the approval of the chairman of the student's special committee.

3. The program for the elementary certificate must include, from either graduate or undergraduate courses, the following: at least six hours of non-administrative professional courses; at least eight hours of liberal-cultural work; and at least eight hours of elementary school methods and materials. The program for the secondary certificate must include the following graduate courses: at least eight hours of non-administrative professional courses if the student is a graduate of a liberal arts college or at least 18 hours of liberal-cultural work if he is a graduate of a teachers college or school of education with thirty to fifty hours in undergraduate professional courses.

4. The holder of either certificate may have his certificate validated to include the privileges of the other by meeting certain requirements:

a. The validity of the elementary principal's certificate may be extended "to include the administration and supervision of a junior high school on evidence that the principal has satisfied the qualifications prescribed for the issuance of a certificate valid for teaching an academic subject in the junior high school." It may be extended "to include the administration and supervision of a secondary school on evidence that the principal has satisfied the qualifications prescribed for the issuance of a principal's certificate valid in the public secondary schools."

b. The validity of a secondary principal's certificate may be extended to include the administration and supervision of an elementary school on evidence that the principal "has completed 15 semester hours in approved and appropriate courses in elementary school administration, organization and supervision, methods and materials." This requirement may be met through the following courses listed above: Ed. 23; Ed. 7; R. E. 251; R. E. 265; R. E. 266; R. E. 276a; Ed. 12; R. E. 122.

Since there are details regarding New York State certificates for principals that cannot be included here, the interested student should study Certification Bulletin No. 1. This bulletin also gives information regarding the requirements for *provisional certificates*.

The program for a 12-grade school, outlined above, indicates a desirable one for those who have responsibility for both elementary and secondary grades.

Legislation passed by New York in 1937 provides that "No person shall hereafter be eligible to the position of superintendent of schools, deputy superintendent of schools, associate superintendent of schools, assistant superintendent of schools or other superintendent of schools or member of a board of examiners in a city or as a superintendent of schools in a village having a population of more than forty-five hundred, or eligible to election to the office of district superintendent of schools in this state, who is not eligible for a superintendent's certificate issued by the commissioner of education in accordance with the following requirements: (a) He shall be a graduate of a college or university approved by the commissioner of education and in addition he shall have completed thirty semester hours in graduate courses approved by the commissioner of education; and (b) At the time of his appointment or election he shall have completed five years of teaching and/or supervision in public schools."

COURSES OF INSTRUCTION

In the **Department of Rural Education** courses are grouped by decades: General, 1-10; Psychology, 11-20; Method, 21-40; Preparation of Teachers for Normal Schools and Colleges, 41-50; Measurement and Statistics, 51-60; Administration and Supervision, 61-80; Theory of Education, 81-100. All courses numbered under 100 are intended primarily for underclassmen; those from 101-200 are primarily for upperclassmen and graduate students; while those numbered 201 and over are primarily for graduate students.

It should be noted that courses carrying the same name are not necessarily equivalents.

GENERAL COURSES

[R.E. 1. **Introduction to Problems of Public Education.** First term. Credit two hours. Not open to freshmen. Designed for students not preparing to teach. Not credited toward the professional requirements in Education. T Th 10. *Agricultural Economics* 125. Professor MOORE.] Not given in 1937-38.

Ed. 20. **Seminar in Education.** First term. Credit two hours. Primarily for graduate students; open to upperclassmen by permission. Professor FREEMAN. T 4-6. *Goldwin Smith* 248.

Topics relevant to educational theory.

Ed. 21. **Seminar in Education.** Second term. Credit two hours. Admission by permission of the instructor. Professor JORDAN. M 4-6. *Goldwin Smith* 248.

Topics developing from historical and current problems of educational practice, especially as related to administration and conduct of the public school system and of the university. Primarily for graduate students.

[R.E. 234. **Seminar.** First term. Credit two hours. Professor BUTTERWORTH.] Not given in 1937-38.

PSYCHOLOGY

Ed. 1. **Educational Psychology.** Either term. Credit three hours. Lectures and recitations. First term, M W F 11. *Goldwin Smith* 234; second term, M W F 10. *Goldwin Smith* 234. Professor FREEMAN.

A study of functional psychology with special reference to the learning process and its application to educational theory and practice.

R.E. 110. **Psychology: An Introductory Course.** Both terms. Credit three hours. Not open to freshmen. First term, M W F 10. Plant Science 233. Professor WINSOR. Second term, M W F 10. Acting Professor MOORE. Fee, \$1.

R.E. 111. **Psychology for Students of Education.** Either term. Credit three hours. Open to juniors and seniors. M W F 11. *Stone* 102. Assistant Professor BAYNE.

R.E. 112. **Psychology for Students of Education.** Either term. Credit three hours. Prerequisite, course 110, Psychology 1, or the equivalent. Open to second term sophomores, juniors, and seniors. First term, M W F 9. Section 1. Primarily for prospective teachers of vocational home economics and of vocational agriculture. *Agricultural Economics Building* 125. Section 2. Primarily for others than those above. *Agricultural Economics Building* 140. Second term. Section 1. M W F 9. *Agricultural Economics Building* 125. Section 2. M W F 11. *Agricultural Economics Building* 125. Both sections primarily for prospective teachers of vocational home economics and of vocational agriculture. Professor KRUSE and Dr. GARDNER.

R.E. 114. **Psychology for Students of Hotel Administration.** First term. Credit three hours. Not open to freshmen. M W F 8. *Stone* 102. Professor WINSOR.

R.E. 117. **Psychology of Childhood and Adolescence.** Either term. Credit three hours. Open only to students who have had course 111 or 112 or its equivalent. Lectures, M W F 10. *Roberts* 392. Professor KRUSE and Dr. GARDNER.

R.E. 119. **Personnel Administration.** Second term. Credit three hours. Prerequisite, course 114 or its equivalent. M W F 8. Acting Professor MOORE.

R.E. 211a. **Psychology for Students of Education.** First term. Credit three hours. For mature students with teaching experience. Lectures, M F 11-12:20. *Stone* 309. Professor KRUSE.

[R.E. 212. **Psychology of Learning.** Second term. Credit two hours. Professor KRUSE.] Not given in 1937-38.

R.E. 213. **Psychology of Learning in the School Subjects.** First term. Credit two hours. Prerequisite, a course in educational psychology and permission of the instructor to register. Primarily for graduate students. S 9-11. *Stone* 309. Assistant Professor BAYNE.

R.E. 216. **Psychology of the Handicapped Child.** Second term. Credit three hours. Prerequisite, course 111 or 112 or equivalent. M W F 11. *Stone* 309. Dr. GARDNER.

R.E. 218. **Seminar in Educational Psychology.** Second term. Credit two hours. Th 4:15-6. *Stone* 309. Professor KRUSE.

R.E. 219. **Seminar in Personnel Administration.** Second term. Credit two hours. Open to qualified seniors and graduates. Th 4:15-6. Comstock 145. Acting Professor MOORE.

Ed. 8. **Experimental Education.** Either term. Credit and hours to be arranged. Consent of the instructor is required. Education 7 or its equivalent should normally precede this course. Professor FREEMAN.

Problems of experimental education; the application of psychological and statistical methods to problems in educational psychology; chief results and bearings.

Ed. 17. **Mental Development.** First term. Credit two hours. Prerequisite, Education 1 or its equivalent. W 2-4. *Goldwin Smith* 248. Professor FREEMAN.

A course in child psychology, dealing with the facts of mental growth and their interpretations.

Ed. 18. **Individual Differences.** Second term. Credit three hours. Prerequisite, Education 1 or its equivalent. It is desirable, though not required, that Education 7 precede this course. M 2-4, and a third hour to be arranged. *Goldwin Smith* 236. Professor FREEMAN.

The nature, causes and implications of individual differences in abilities, interests and achievement. Graduate students desiring to do so will be given an opportunity to make a special study of problem cases.

METHOD

R.E. 121. **Method and Procedure in Secondary School Teaching.** First term. Credit three hours. Prerequisite, course 111 or its equivalent. Open to juniors and seniors. Lectures, M W F 11. *Plant Science* 143. Professor FERRISS.

The development of certain principles of teaching in secondary schools, and their applications to practical problems of the teacher, such as selecting and organizing teaching materials, making the assignment, directing study, and so forth.

Ed. 4. **Methods, Practice, and Extra-Instructional Problems.** Credit nine hours. For teachers of academic subjects. Assistant Professor HULSE in charge.

Ed. 4a. **Method and Procedure in High School Teaching.** Either term. Credit three hours. First term, for seniors only. M W F 11. *Goldwin Smith* 264. Second term, for juniors and B seniors. M W F 11. *Goldwin Smith* 256. Professor JORDAN and Assistant Professor HULSE.

Designed for students who expect to teach in secondary schools. Methods of class management, types of recitation, assignment and planning of lessons. Observation of actual high school classes required. Prerequisite to Education 4b and 4d.

Prospective teachers in all academic fields will be assigned to this course to maintain as far as possible two equal groups. One group will take this course in the second term of their junior year, the other group will take this course in the first term of their senior year.

Ed. 4b. Supervised Teaching. Either term. Credit four hours. For seniors majoring in English and Social Studies. Assistant Professor ANDERSON and Dr. BESIG.

Assignment will be made to the classes of the critic teacher. Practice and observation scheduled daily at a regular hour and the work will be closely integrated with instruction in special method.

Ed. 4c. Extra-Instructional Problems. Either term. Credit two hours. M 4. *Goldwin Smith* 256. Assistant Professor HULSE.

A course dealing mainly with problems of extra-instructional nature and designed to acquaint the teacher with the full responsibilities of his position. Taken by all seniors in the term of their practice teaching.

Ed. 4d. Supervised Teaching. Either term. Credit two hours. Assistant Professor HULSE, Assistant Professor JOHNSON, and teachers of the Ithaca Senior and Junior High Schools.

Assignments will be made to the classes of the regular teachers in the schools. Each student teacher is required to attend one class each day, five days a week for a term. The work will involve participation and practice under the supervision of the regular teacher and the instructor of the course. The work will be coordinated with special methods.

Special Methods. The following courses are offered by the several departments to satisfy the two-hour requirement in special method:

Teacher's Training Course. See Latin 26.

Teacher's Course in Methods. See German 40.

Teacher's Course. See Mathematics 20.

Teaching of Science in the Secondary School. See Rural Education 126.

Ed. 4e. Conference and Special Problems. Either term. Credit two hours. Hours to be arranged. Assistant Professor HULSE.

Conference with the instructor in charge and the study of special problems supplementing the practice of teaching.

R.E. 126. The Teaching of Science in the Secondary School. Either term. Credit two hours. Open to seniors on the approval of the instructor. Th 4:15-5:45. *Fernow* 8. Assistant Professor JOHNSON.

Special methods of teaching science and the organization of science materials in the secondary school. This course is correlated with practice teaching in science.

R.E. 131. Introduction to the Teaching of Agriculture. First term. Credit three hours. When taken with course 132, only two hours credit allowed. Open by permission only to upperclass students preparing to teach agriculture whose practical experience and course grades are satisfactory, and whose progress in the prescribed courses in technical agriculture is adequate. T Th 11. *Plant Science* 141. Laboratory, M 1:40-4. *Stone* 102. Professor STEWART.

A consideration of the organization of schools and departments of agriculture in the high schools for regular part-time and adult classes; a study of the opportunities and responsibilities of teaching vocational agriculture; a checking of teacher qualities; the making of observations of teaching; and the general preparation of students for the advanced work of course 132. Laboratory fee, \$3.50.

R.E. 132. The Teaching of Agriculture in the Secondary School. Throughout the year. Credit three hours each term. Open to students who have completed courses 111 and 131 or their equivalents, whose farm practice experience is satisfactory and whose course grades are satisfactory. T Th 9. *Stone* 309. One laboratory a week or equivalent in directed teaching is required. Assistant Professor HOSKINS and Mr. PACKER.

A study of the problems of teaching based upon participation in teaching and planning for teaching. A consideration of the agricultural part of the curriculum, courses of study, appropriate methods of teaching, text and bulletin materials,

equipment, and the community relationships involved. Laboratory fee, \$5 each term.

R.E. 133. **Apprentice Teaching in Agriculture.** Either term. Credit to be arranged. Registration subject to conference. Certain students whose directed-teaching experience is well toward completion may be permitted to accept regular teaching responsibilities in the schools, under the direction of the Vocational Education staff, where opportunities arise. Professor STEWART, Assistant Professor HOSKINS and Mr. GALBREATH.

R.E. 134. **Adult Education.** First term. Credit three hours. M W F 11. *Agricultural Economics Building 125.* Professor MOORE.

A consideration of the developments, trends, opportunities and problems of adult education.

[R.E. 134a. **Adult Education.** Second term. Credit two hours. Designed for vocational students. Assistant Professor HOSKINS.] Not given in 1937-38.

R.E. 135. **The Teaching of Home Economics in the Secondary School.** Either term. Credit three hours. Prerequisite, course 111 or its equivalent. Lecture, Th 2-4:20. *Stone 102.* Miss HUTCHINS.

One period daily for observation and participation in the Ithaca Junior High School throughout the semester. Schedules must be approved by the Department of Rural Education.

This course purposes to interpret present-day educational theories and practices as applied to home economics; to study the activities in which the home-economics teacher engages, and the factors which make for successful performance; to induct students into teaching through graded participation in the home-arts department of the Ithaca Junior High School. Laboratory fee, \$2.

R.E. 136. **Directed Teaching of Home Economics in the Secondary School.** Either term. Credit four hours. Prerequisite, course 135. Open to seniors who have successfully completed prerequisites in Education and have been approved by a committee composed of members of the faculties of Home Economics and Education. General conferences, S 8-10. *Stone 102.* Professor BINZEL and Misses HASTIE and COWLES.

Schedules must provide three entire days a week, or the equivalent, over a period of five weeks for directed teaching. Visits to schools for the purpose of studying furnishings and equipment are a part of the course. Laboratory fee, \$10.

R.E. 137. **Extra-Instructional Problems.** First or second term. Credit two hours. First term for students in Home Economics only. Second term for prospective teachers of science and home economics. T Th 9. *Plant Science 143.* Professor FERRISS.

Primarily for prospective teachers of science and home economics. This course is designed to deal with problems confronting the teacher in the performance of those duties and the meeting of those responsibilities in the school that extend beyond the classroom and class instruction.

[R.E. 222. **Principles of Method.** Second term. Credit three hours. Given in alternate years. Prerequisite, course 211a or its equivalent and teaching or comparable experience in agriculture, homemaking, or science. Professor STEWART.] Not given in 1937-38.

R.E. 226. **Research in Science Teaching.** Either term. Credit one or two hours each term. Hours to be arranged. *Fernow 8.* Professor PALMER and Assistant Professor JOHNSON.

Special problems in science teaching.

[R.E. 227. **Seminar in Elementary Education.** First term. Credit two hours. Professor MOORE.] Not given in 1937-38.

Topic to be determined by the interests of the members.

R.E. 228. **Seminar in Behavior and Guidance.** Second term. Credit two hours. For graduate students who have had some work in child guidance. F 4-6. Nursery School. Professor WARING.

The seminary discusses the sources in the psychologies, past and present, for studying principles of learning and teaching that can be relied upon in homes, in schools, and in all family and social living, and attempts to apply these principles to the homely everyday problems of behavior and guidance.

[R.E. 232. **Advanced Problems in Program Planning for the Teaching of Agriculture.** Second term. Credit two hours. Open to undergraduates by permission only. Assistant Professor HOSKINS.] Not given in 1937-38.

R.E. 240. **Cooperative Extension Work.** Second term. Credit three hours. Open to graduate students qualified in agriculture or home economics. T Th 11. *Stone* 102. Professor EATON.

A study of the educational aims, content, and methods of the cooperative extension work in agriculture and home economics.

PREPARATION OF TEACHERS FOR NORMAL SCHOOLS AND COLLEGES

R.E. 241. **The Preparation of Teachers for Normal Schools and Colleges.** Second term. Credit three hours. M W F 10. *Stone* 211. Professor BUTTERWORTH.

To meet the needs of those responsible for the training of teachers for rural elementary and secondary schools.

[R.E. 243. **Problems of College Teaching.** Throughout the year. Credit one hour a term. Open to graduate students intending to teach in higher institutions. Time of meeting once a week will be arranged after a preliminary conference with students at a session to be announced at the opening of the first term. Professor EATON.] Not given in 1937-38.

[R.E. 245. **The College Preparation of Teachers of Agriculture for the Secondary School.** Second term. Credit three hours. Given in alternate years. (Given in 1938-39.) Professor STEWART.] Not given in 1937-38.

[R.E. 248. **The Preparation of Teachers of Home Economics for the Secondary School.** Second term. Credit three hours. Given in alternate years. Open to graduate students of approved qualifications. Professor BINZEL.] Not given in 1937-38.

R.E. 249. **Seminar in Home Economics Education.** First term. Credit two hours. Time to be arranged. Course content to be adapted to personnel of class. Professor BINZEL.

R.E. 250. **Seminar in Agricultural Education.** First term. Credit two hours. Open only to graduate students whose progress in graduate study is satisfactory T 4-5:30. *Stone* 309. Professor STEWART.

Typical pieces of research in agriculture related primarily to agriculture in secondary schools. Individual problems furnish the basis of approach.

MEASUREMENT AND STATISTICS

Ed. 7. **Mental Measurements.** First term. Credit three hours. By permission of the instructor, candidates for the principal's certificate may enroll for two hours credit. Prerequisite, Education I or equivalent. T Th S 9. *Goldwin Smith* 225. Professor FREEMAN.

The nature of intelligence; History of the development of individual and group tests of intelligence; principles underlying their construction and application; the use of tests of intelligence in school problems, with atypical children, and in fields outside the school. Use of educational tests. Demonstrations in administering tests.

R.E. 251. **Educational Measurement.** First term. Credit three hours. Candidates for the principal's certificate may register for two hours credit. Prerequisite, a course in educational psychology. Open to graduate and upperclass students. T Th 8 and hours to be arranged. *Stone* 309. Assistant Professor BAYNE.

Educational measurement in relation to the classification of pupils, determination of the progress of pupils, and other problems of the teacher, supervisor, and administrator.

R.E. 253. Statistics for Students of Education. Second term. Credit three hours. Primarily for graduate students in education. Open to a limited number of other students upon approval of the instructor. T Th 10 and an hour to be arranged. Assistant Professor BAYNE.

A study of common statistical procedure in relation to critical reading of technical studies, research, and writing reports of studies. As far as possible, the work is related to the problems of the individual student.

ADMINISTRATION AND SUPERVISION

Ed. 10. High School Administration. Second term. Credit two hours. For seniors, graduates, and other qualified students. W F 3. *Goldwin Smith 236.* Professor JORDAN.

Principles relevant to administration of the senior and junior high school; classification of pupils; program making; curriculum problems; the principal as supervisor; pupil guidance; duties of the principal in both large and small high schools.

Ed. 11. Extra-classroom Activities. First term. Credit two hours. For seniors and graduates. M 4-6. *Goldwin Smith 236.* Professor JORDAN.

A study of the place extra-classroom activities should assume in the school program. General principles involved, with special attention given to athletics, dramatics, publications, school finance, music, debate, and school clubs.

Ed. 12. The Junior High School. First term. Credit three hours. For seniors, graduates and other qualified students. M W F 9. *Goldwin Smith 248.* Professor JORDAN.

Psychological, biological, and pedagogical bases for the Junior High School; fundamental principles; organization and administration; curricular content in detail; methods of instruction.

R.E. 261. The Administration of Rural Schools. First term. Credit three hours. Candidates for a principal's certificate may register for two hours credit. T Th 11 and an additional hour to be arranged. *Stone 102.* Professor BUTTERWORTH.

A course for students of experience dealing with the problems of organizing and administering education in the elementary and secondary schools of country and village districts.

R.E. 262a. School Finance. Second term. Credit two hours. T Th 9. *Stone 102.* Professor BUTTERWORTH.

Typical problems; how local school funds are levied, collected, and disbursed; cost accounting; budget making; bonding; sources of state funds and their distribution. The discussion is based upon actual problems; prospective members of the class are urged, therefore, to bring with them financial data regarding their schools.

[R.E. 262c. **The School Plant.** Second term. Credit two hours. Professor BUTTERWORTH.] Not given in 1937-38.

R.E. 263. Procedures and Techniques in Supervision. First term. Credit three hours. Candidates for a principal's certificate may register for two hours credit. M W F 10. *Stone 309.* Professor MOORE.

Designed for superintendents, supervisors, and principals. Students who have not had experience in these fields will be admitted only upon permission of the instructor. Students taking this course must be prepared to spend four full days or more in observing supervisory procedures in various school systems.

[R.E. 264. **Seminar in Rural School Administration.** Second term. Credit two hours. Professor BUTTERWORTH.] Not given in 1937-38.

R.E. 265. **Seminar for Principals.** Second term. Credit three hours. Required of all graduate students who are candidates for a principal's certificate. W 4-6 and additional time in field work. *Stone* 309. Professor MOORE.

R.E. 266. **The Supervision of the Elementary School Subjects.** Second term. Credit three hours. Candidates for a principal's certificate may register for two hours credit. M W F 9. *Stone* 309. Professor MOORE.

A course designed for supervisors, elementary school principals, and superintendents. It includes a consideration of important research studies which have a direct bearing upon the teaching and supervision of the elementary school subjects.

R.E. 267. **The Organization and Administration of Agricultural Education.** Second term. Credit three hours. Should follow course 261 or its equivalent. T Th 11-12:20. *Stone* 309. Professor STEWART.

Designed primarily for persons preparing to organize, administer, and supervise agricultural education. Participation in field experience, field study, and supervision make up a part of the program of study.

[R.E. 269. **The Administration and Supervision of Home Economics Education.** First term. Credit three hours. Given in alternate years. Open to students of approved qualifications. Professor BINZEL.] Not given in 1937-38.

R.E. 276. **Principles of Curriculum Building.** Second term. Credit three or four hours. Primarily for graduate students. T Th 2-3:20, and an additional hour to be arranged for those wishing to carry further the study of special curriculum problems. *Stone* 309. Professor FERRISS.

A consideration of the major problems, principles, and technics in determining educational objectives and curriculum content and organization.

R.E. 277. **Vocational Courses of Study in Agriculture.** Second term. Credit two hours. T Th 10. *Stone* 102. Assistant Professor HOSKINS.

A study of the making of vocational courses in agriculture for secondary schools, as based upon the agricultural part of the curriculum and as correlated with teaching units and supervised teaching programs.

R.E. 278. **Seminar in Rural Secondary Education.** Second term. Credit two hours. Given in alternate years. M 4-6. *Stone* 102. Professor FERRISS.

EDUCATIONAL THEORY

Ed. 2. **Principles of Secondary Education.** Either term. Credit three hours. Prerequisite, Education I. First term. Professor JORDAN. M W F 2. Second term. Professor FREEMAN. T Th S 9. *Goldwin Smith* 234.

The nature and significance of education; biological and psychological foundations; the secondary school as a social institution; educational ideas and values; the curriculum.

Ed. 5. **Theory of Education.** Second term. Credit two hours. For seniors and graduate students. Prerequisite, Education I or the equivalent. T Th 11. *Goldwin Smith* 248. Professor OGDEN.

Behavior, learning, insight, personality and character as foundations of educational theory.

R.E. 181. **Principles of Education.** First or second term. Credit three hours. Prerequisite, Rural Education 111 or its equivalent. Open to juniors and seniors. Students preparing to teach home economics should take this course. First term, M W F 9. Second term, section 1, M W F 9; section 2, M W F 11. *Caldwell* 143. Professors MOORE and EATON.

A consideration of fundamental principles of education, with special attention to the needs of prospective teachers in the high school.

R.E. 194. **Philosophy of Vocational Education.** First term. Credit three hours. Open to seniors and graduate students qualified in educational psychology, and economics or sociology. T Th 10. *Stone* 309. Professor EATON.

A study of the theory of vocational education in the large.

R.E. 281. **Rural Secondary Education.** First term. Credit three hours. Primarily for graduate students. M W F 9. *Stone* 309. Professor FERRISS.

A course to consider some of the more basic problems in the nature, organization, curriculum, and extension of secondary education in its adaptation to rural needs and conditions.

R.E. 294. **Philosophy of Education.** Second term. Credit three hours. Open to graduate students in education. M W F 11. *Stone* 309. Professor EATON. An examination of the concepts of education, and of the bearing of several major theories of life upon education.

R.E. 295. **Comparative Education.** First term. Credit two hours. S 11-12:30. *Stone* 309. Professors BUTTERWORTH, FERRISS, and MOORE.

A consideration of the educational systems of certain European countries.

NATURE STUDY

R.E. 107. **The Teaching of Nature Study and Elementary-School Science.** Second term. Credit three hours. Open to those who have taken or are completing thirty hours in science and have had at least one term of suitable professional work. Lecture, M 12. *Fernow* 8. Practical exercises, T Th 1:40-4. Professor PALMER and Miss GORDON.

A study of the content and methods of nature study and elementary school science programs, with consideration of their significance to agriculture and to secondary school science. Recommended for those preparing to teach or supervise science.

R.E. 108. **Field Natural History.** First term. Credit two hours. Not open to freshmen. Lectures, Th 1:40-2:30. *Fernow* 8. Field work, Th 2:30-5. Professor PALMER and Miss GORDON.

Field trips and lectures devoted to a study of the natural history of five ecological units under different seasonal conditions with special emphasis on their contributions to the teaching of science.

[R.E. 202. **Nature Literature.** First term. Credit two hours. Open to students who will have completed their preparation for certification as science teachers by the end of the current year. Professor PALMER and Miss GORDON.] Not given in 1937-38.

R.E. 209. **The Nature Movement and Its Makers.** First term. Credit two hours. M W 10. *Fernow* 8. Professor PALMER and Miss GORDON.

Discussion of the history of the nature movement, with special consideration of its influence on, and its relation to, the teaching of science in elementary and secondary schools. Studies are made of the present and past status of nature and science education.

RESEARCH

300. **Special Studies.** Credit as arranged. Members of the staff.

Students working on theses or other research projects may register for this course. The staff members concerned must be consulted before registration.

CORNELL UNIVERSITY OFFICIAL PUBLICATION

Entered as second-class matter, December 14, 1916, at the post office at Ithaca, New York, under the Act of August 24, 1912.

Published at Ithaca, New York, monthly, September to November, and semi-monthly, December to August.

This series of pamphlets is designed to give prospective students and other persons information about Cornell University. No charge is made for the pamphlet unless a price is indicated after its name in the list below. Requests for pamphlets should be addressed to the Secretary of the University at Ithaca. *Money orders should be made payable to CORNELL UNIVERSITY.*

The prospective student should have a copy of the

General Information Number

and a copy of one or more of the following Announcements:

Announcement of the Graduate School.

Announcement of the Medical College.

Announcement of the Law School.

Announcement of the College of Arts and Sciences.

Announcement of the College of Architecture.

Announcement of the College of Engineering.

Announcement of the New York State College of Agriculture.

Announcement of the Two-Year Courses in Agriculture.

Announcement of the Winter Courses in the College of Agriculture.

Announcement of Courses in Wild-Life Conservation and Management.

Announcement of the Farm Study Courses.

Program of the Annual Farm and Home Week.

Announcement of the New York State College of Home Economics.

Announcement of the Course in Hotel Administration.

Announcement of the New York State Veterinary College.

Announcement of the Graduate School of Education.

Announcement of the Department of Chemistry.

Announcement of the Summer Session.

Annual Report of the President.

Special departmental announcements, a list of prizes, etc.

Directory of the University. Price, postpaid, 25 cents.

Correspondence regarding the Cornell University Official Publication should be addressed to

THE SECRETARY, CORNELL UNIVERSITY,
ITHACA, NEW YORK.